9
69P

THE PLANT DISEASE REPORTER

LIBRARY
NOV 1 1924
U.S. Dept. of Agriculture

Issued By

The Plant Disease Survey

Volume VIII Number 11

November 15, 1924

BUREAU OF PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

THE PLANT DISEASE REPORTER

Issued by

THE PLANT DISEASE SURVEY

Vol. VIII November 15, 1924 Number 11

APPLE SCAB

Several recent reports of scab on late apples have been received as follows:

New Hampshire: Less prevalent than last year, and the amount of fruit rendered unusable is small. (Butler, Nov. 1)

Vermont: Early in the season scab was rare, and later it has occurred less generally and seriously than usual. (Gilbert, Oct. 11)

Virginia: Very general throughout state and especially severe in Winchester section where over ten inches of rain fell in the month of May, which greatly interfered with application of sprays. Losses will probably equal those of 1922. Less severe in Piedmont where orchard surveys show average loss to be about 2.5%. First ascospore discharge noted on same date, April 18, at Blacksburg, Crozet and Winchester. First leaf infection seen May 9 at Blacksburg. In epidemic stage at Winchester May 26. Infection continued to spread up to harvest except for hot, dry spell in midsummer. (Fromme, Nov. 1)

West Virginia: Scab generally severe in all unsprayed orchards. Generally speaking, scab was well controlled with proper spraying in spite of season. Control was lost, however, in certain cases where heavy infection occurred in 1923, and sprays improperly timed. (Giddings & Sherwood, Oct. 15)

South Carolina: One record. Prevalence probably fairly general in the apple producing region. (Ludwig, Nov. 1)

Wisconsin: More than usual. (Vaughan, Nov. 1)

Michigan: Common in all sections of the state. Late infection very abundant. Many small spots just beginning to show on the fruit at harvest time. (Bennett, Nov. 1)

MORE REPORTS CONCERNING FIRE BLIGHT ON APPLES

Virginia: Slight loss for state as a whole. First observed May 12 at

Burkeville. At Crozet it was almost non-existent during the wet season of 1924 and very prevalent in dry season (spring) of 1923. (Fromme, Nov. 1)

Michigan: Most severe outbreaks reported from northern and eastern parts of state. The disease was active until very late in the season, probably because of unusual twig growth due to a wet summer. In general, fire blight caused less damage than in 1923. (Bennett, Nov. 1)

Missouri: As reported previously, the occurrence of fire blight on apple was general and more severe than at any other time during the last ten years. This infection was present mainly as blossom blight. (Maneval, Nov. 8)

CEDAR RUST OF APPLES

Fruit infection especially severe this year

Virginia: Very severe in sections where cedars not removed. First infection noted May 9 at Blacksburg. Loss especially severe in Shenandoah County. Noteworthy feature of season was the high percentage of fruit infection; 22% infected fruit of Ben Davis found at Crozet. (Fromme, Nov. 1)

West Virginia: A large amount of fruit infection and frequent cases where it is difficult to identify from external symptoms. (Giddings, Nov. 1)

Missouri: Apple rust seemed to be more severe than usual. Station workers and others noted its occurrence in all the apple growing sections of the state. (Maneval, Nov. 8)

Arkansas: Worst since 1913. Mr. Leslie Pierce of the Bureau of Plant Industry stationed at Bentonville, Arkansas, estimates that 10% of the Ben Davis and Gano fruits were affected. Black rot follows in many cases. (Young, Nov. 1)

VIRGINIA AND SOUTH CAROLINA REPORT ON BITTER ROT OF APPLES

Virginia: Severe locally and generally distributed, but did not cause loss of importance for state. A good early start (June 25 at Crozet) but midsummer weather not favorable for excessive spread. About 2% loss on average for Piedmont section. Less than this for entire state. (Fromme, Nov. 1)

South Carolina: Condition on college farm only one observed. Loss perhaps 1 to 5% in spite of spraying. (Ludwig, Nov. 1)

APPLE BLACK ROT IN VIRGINIA AND MICHIGAN

Virginia: Frog-eye not as serious as anticipated from earlier reports and most commercial orchards not seriously injured. First observed May 12 at Winchester. (Fromme, Nov. 1)

Michigan: Present in most orchards in about the usual amount. (Bennett, Nov. 1)

COLLABORATORS FROM VIRGINIA AND WEST VIRGINIA REPORT ON APPLE BLOTCH

Virginia: First noted June 26 at Winchester. Severe locally on Northwestern Greening and Ben Davis, but not important for commercial crop of state. (Fromme, Nov. 1)

West Virginia: Blotch unusually severe, especially in central and southern sections of state. Disease well controlled with 3-5-50 Bordeaux 2-4-6 weeks after petal fall. (Sherwood & Giddings, Oct. 15)

MORE REPORTS ON LATE BLIGHT AND ROT OF POTATO (PHYTOPHTHORA INFESTANS)

West Virginia: Prevalent throughout mountain section, and wider distribution than any year since 1920. Generally rather late in appearance. Total loss about 25% of crop. Percentage of tuber rot small. Apparently due to dry fall. (Sherwood & Berg, Oct. 15)

Wisconsin: Late development statewide following digging. Especially severe on heavy types of soil in central and eastern sections. Potatoes in northwest or Barron area, and in central section on sandy soil not so much rot. Slight summer drought occurred in Barron County. Confused with slight frost damage in northern areas. (Vaughan, Nov. 1)

THREE MORE STATES REPORT ON SCAB OF LATE POTATO

Connecticut: Several reports; at least average amount. (Clinton, Oct. 15)

New York, Long Island: Scab was unusually severe in many fields, this apparently was associated with wet weather during the early stages of tuber formation. Many farmers are using inoculated sulfur and securing good control. (Clayton, Oct. 30)

Wisconsin: Much less than last year. Freedom from scab seems to be associated with lower temperature and more moisture rather than any greater amount of seed treatment. (Vaughan, Nov. 1)

CELERY DISEASES IN MICHIGAN

Under date of November 1 Ray Nelson of the Michigan College of Agriculture reports as follows concerning Michigan celery diseases:

Late blight (Septoria apii)

Losses as high as 50% in the middle crop in the Kalamazoo region. Cold dry weather checked the development of the disease in the late ccop and not more than 25% reduction in yield will be caused by this fungus. Dust has given satisfactory control in the one crop regions and has greatly reduced the disease in the Kalamazoo district where three crops are grown each season.

Early blight (Cercospora apii)

More than usual this year. Not serious. Around Kalamazoo found in all fields together with Septoria and Bacterial leafspot but damage to the crop is slight. Dusting fairly effective.

Bacterial leafspot (Bacterium apii)

This disease is unusually prevalent this year in all celery districts of the state. The season has been cool and wet and these conditions have apparently favored the development of this trouble. Dusting less effective than against Septoria. Losses from 1 to 10%.

Yellows (Fusarium sp.)

Due to the cool,wet season this disease has not been serious this year. In the middle crop at Kalamazoo 5 to 10% of the plants of the yellow varieties showed early infection. A great many of these outgrew the disease with the onset of cooler weather. This is the first time in several years that yellow celery has been grown in quantity at Kalamazoo. With ordinary varieties the success of the crop depends upon cool seasons like this one. The season was unfavorable for testing our Yellows-resistant strain but greenhouse tests continue to show the value of this variety in sick soil. About 120 pounds of seed of this strain is now available for distribution. First report from Muskegon this year.

"Marl disease" (Undetermined)

This trouble has been the cause of serious losses in some fields. One grower in the Manchester district reports $3000 loss. The disease occurs quite generally around Manchester and has been reported from two other counties of the state.

The trouble appears to be correlated with excess lime in the soil although not definitely determined. The plants become very brittle, "glassy", and the tissues of the stalks burst, turn brown and slough away. Some evidence that applications of potash reduce the amount of the disease.

CUCUMBER MOSAIC SERIOUS ON LONG ISLAND

E. E. Clayton of the New York Agricultural Experiment Station, located at Riverhead, Long Island reported on October 30 that mosaic was epidemic again this year and reduced the pickle crop by as much as 75%. Several growers will not plant this crop another year owing to the very severe loss from the trouble this year.

SUGAR CANE MOSAIC AS REPORTED FROM LOUISIANA AND MISSISSIPPI

Louisiana: All over the sugar belt and approaching maximum infection in all regions except the extreme western. (Edgerton, Oct. 15)

Mississippi: There has been a widespread infection in the southern counties as usual but we do not have any estimate as to the amount of damage done. One field was reported to have a 25% infection.

Mosaic was reported from the counties, Kemper, Newton, Lauderdale, and Washington for the first time. It has not been found further north than the above mentioned counties. (Neal & Wallace, Oct. 15)

RED ROT OF SUGAR CANE (COLLETOTRICHUM FALCATUM)

Louisiana: Seriously affected the germination in the spring, causing very poor stands in many regions.

Very little red rot in growing cane in the summer on account of the dry weather and slight borer infestation. (Edgerton, Oct. 15)

Mississippi: We have had several reportsof red rot in this state but in most every case of cane infection, the fungus appears to have followed borer injury. (Neal & Wallace, Oct. 15)

THE COTTON DISEASE SITUATION IN ILLINOIS

P. A. Young of the Illinois State Natural History Survey sends in the following report on cotton diseases as observed in his state this season.

"On the 19-22 of this month, I had the opportunity of making a brief trip into the cotton growing region of this state again. Because of the unusually late fall, it seems likely that more than half of the crop on the approximately 20,000 acres planted in southern Illinois will mature. During the last days

of August, I inspected many fields and looked at three more during the above trip. I have seen no evidence of serious plant diseases in cotton so far. The angular leaf spot and boll-rot caused by Pseudomonas malvacearum is very abundant on generally a few leaves of most plants and is occasionally seen on the bolls.

"The large brown leafspot, probably the leaf blight caused by Mycosphaerella gossypina is more abundant than the angular leaf spot. On the last trip, practically all of the leaves seen bore several leaf spots.

"Wilt and anthracnose do not seem to have appeared yet. This is only the third year of commercial cotton growing in Illinois in recent times." (Oct. 31)

Library,
U. S. Department of Agriculture
Washington, D. C.